

FORM PTO-1449  
Rev. 2-32)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01-100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

RECEIVED

MAR 19 2003

Technology Center 2600

Applicant:  
Rudger Rubbert et al.

Filing Date:  
04/13/01

Group:  
2621



U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWC ↓ ✓	6,434,278	08/13/02	Hashimoto	382	285	
	6,434,265	08/13/02	Xiong et al	382	154	
	6,363,163	03/26/02	Xu et al	382	130	
	6,047,078	04/04/00	Kang	382	107	
	5,937,083	08/10/99	Ostuni	382	131	
	5,748,199	05/05/98	Palm	345	473	

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

EXAMINER	DATE CONSIDERED
<i>AG</i>	11/29/01

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

FORM PTO-1449  
(Rev. 2-32)U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01-100

09/895,007

RECEIVED

FEB 20 2003

Applicant:

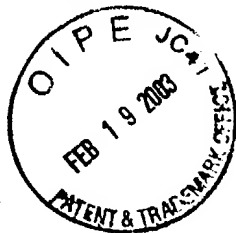
Rudger R. Technology Center 2600

Filing Date:

04/13/01

Group:

2621

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
dwc	6,407,735	06/18/02	Kressin	345	420	
	5,937,083	08/10/99	Ostuni	382	131	
	6,047,078	04/04/00	Kang	382	107	
	6,363,163	03/26/02	Xu et al.	382	130	
	6,434,265	08/13/02	Xiong et al.	382	154	
	6,434,278	08/13/02	Hashimoto	382	285	

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

--	--	--	--

EXAMINER	<i>CA</i>	DATE CONSIDERED	11/29/01
----------	-----------	-----------------	----------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

FORM PTO-1449  
 (Rev. 2-32)

 U.S. Department of Commerce  
 Patent and Trademark Office

Atty. Docket No.

Serial No.

01-100

09/835,007

 INFORMATION DISCLOSURE  
 STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Rudger Rubbert, et al

Filing Date:

04/13/01

Group:

2621



## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWC	4,185,918	01/29/80	DiMatteo et al.	356	375	
	4,500,206	02/19/85	Cole et al.	356	376	
	4,575,805	03/11/86	Moermann et al	364	474	
	4,611,288	09/09/86	Duret et al.	364	474	
	4,663,720	05/05/87	Duret et al.	364	474	
	4,825,263	04/25/89	Desjardins et al	356	376	
	4,837,732	06/06/89	Brandestini et al.	364	413.28	
	4,867,570	09/19/89	Sorimachi et al	356	376	
	4,873,449	10/10/89	Paramythioti et al.	250	560	
	5,011,405	04/30/91	Lemchen	433	24	
	5,027,281	06/25/91	Rekow et al.	364	474.24	
	5,085,502	02/04/92	Womack et al.	356	376	
	5,166,878	11/24/92	Poelstra	364	424.01	
	5,289,264	02/22/94	Steinbichler	356	376	
	5,309,243	05/03/94	Tsai	348	221	
	5,372,502	12/13/94	Massen, et al.	433	215	
	5,424,836	06/13/95	Weise et al.	356	376	
	5,431,562	06/11/95	Andreiko et al.	433	24	
	5,545,039	08/13/96	Mushabac	433	215	
	5,608,211	03/04/97	Hirono et al.	250	234	
	5,615,003	03/25/97	Hermay et al.	356	3.03	
	5,878,159	03/02/99	Taleblou et al.	382	128	

 RECEIVED  
 JUL 18 2001  
 Technology Center 2600

FORM PTO-1449  
(Rev. 2-32)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01-100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

Applicant:  
Rudger Rubbert, et al

Filing Date:  
04/13/01

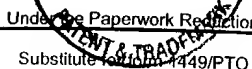
Group:  
2621



RECEIVED  
JUL 18 2001  
Technology Center 2600

U.S. PATENT DOCUMENTS (continued)

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
Awc	5,970,499	10/19/99	Smith et al.	707	104	
	5,975,893	11/02/99	Chisti et al	433	06	
	6,068,482	05/30/00	Snow	433	223	
	6,099,314	08/08/00	Kopelman et al.	433	213	
	6,217,325	04/17/01	Chishti et al.	433	24	
	6,227,850	05/08/01	Chishti et al.	433	24	
	6,227,851	05/08/01	Chishti et al.	433	24	



PTO/SB/08A (08-03)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
o a collection of information unless it contains a valid OMB control number.

(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

**Complete if Known**

Application Number	09/835,007
Filing Date	Apr. 13, 2001
First Named Inventor	Ruedger Rubbert
Art Unit	2621
Examiner Name	
Attorney Docket Number	01-100

RECEIVED  
NOV 21 2003  
Technology Center 2600

[illegible]

Examiner  
Signature

Date	
Considered	

11/29/04/

<p>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="http://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.</p>	<p>Considered</p>	<p>11/29/04</p>
--	-------------------	-----------------

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

*If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.*

Serial No.

09/835,007

**Group:**  
2621

FFR 20-2002

**Technology Center 2000**



## 425

**No**

XAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

FORM PTO-1449  
(Rev. 2-32)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01,100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)



Applicant:

Rüdger Rubbert, et al.

Filing Date:

04/13/01

Group:

2621

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWC	5,278,756	01/11/94	Lemchen et al.	364	413	
↓	6,049,743	04/11/00	Baba	700	163	1
↓	6,081,739	06/27/00	Lemchen	600	407	
↓	6,405,071	06/11/02	Analoui	600	425	
↓	6,488,503	12/03/02	Lichkus	433	167	
↓	6,512,994	01/28/03	Sachdeva	702	167	

RECEIVED  
JUL 23 2003

FOREIGN PATENT DOCUMENTS

Technology Center 2600

Document Number	Date	Country	Class	Subclass	Translation
					Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

EXAMINER	DATE CONSIDERED
<i>AWC</i>	11/29/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Under the Paperwork

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

PTO/SB/08A (08-03)  
Approved for use through 07/31/2006. OMB 0651-0031  
Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Information unless it contains a valid OMB control number.

**Complete if Known**

Application Number	09/835,007
Filing Date	Apr. 13, 2001
First Named Inventor	Ruedger Rubbert
Art Unit	2621
Examiner Name	
Attorney Docket Number	01-100

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

[illegible]Examiner  
Signature

Date  
Considered

11/29/02

<p>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="http://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.</p>	<p>Considered</p>	<p>11/29/04</p>
--	-------------------	-----------------

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

*If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.*



CRM PTO-1449  
(Rev. 2-32)U.S. Department of Commerce  
Patent and Trademark OfficeINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

Atty. Docket No.

01-100

Serial No.

09/835,007

Applicant:  
Rudger Rubbert et al.Filing Date:  
04/13/01Group:  
2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWC	6,371,761	04/16/02	Cheang et al.	433	24	

RECEIVED

JUN 24 2002

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

AWC			Yee et al., "Three-Dimensional Imaging System", Optical Engineering, Vol. 33, No. 6, pp. 2070-2075 (June 1994)
EXAMINER			DATE CONSIDERED 11/29/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

PTO-1449  
(2-32)U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01,100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)



RECEIVED  
OCT 19 2001  
Technology Center 2600

Applicant:

Rudger Rubbert et al.

Filing Date:

04/13/01

Group:

2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWC	5,988,862	11/23/99	Kacyra et al.	703	6	
	5,991,437	11/23/99	Migdal et al.	382	154	
	6,088,695	07/11/00	Kara	707	10	
	6,100,893	08/08/00	Ensz et al.	345	420	
	6,124,934	09/26/00	Shahar et al.	356	624	
	6,139,499	10/31/00	Wilk	600	443	
	6,167,151	12/26/00	Albeck et al.	382	154	
	6,201,546	03/13/01	Bodor et al.	345	430	
	6,205,716	03/27/01	Peltz	52	36.2	
	6,211,506	04/03/01	Pryor et al.	250	208.1	
	6,217,334	04/17/01	Hultgren	433	215	
	6,253,164	06/26/01	Rohm et al.	703	2	

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

AWC International Search Report dated August 15, 2001, for International Application No. PCT/US01/12107 of OraMetrix, Inc.

EXAMINER

DATE CONSIDERED

11/29/01

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

PTO-1449  
(2-32)U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

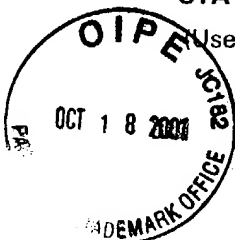
Serial No.

01,100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)



RECEIVED  
OCT 19 2001  
Technology Center 2600

Applicant:

Rudger Rubbert et al.

Filing Date:

04/13/01

Group:

2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
Awc	Re. 35,816	06/02/98	Schulz	356	608	
	4,286,852	09/01/81	Stern et al.	396	106	
	4,294,544	10/13/81	Altschuler et al.	356	610	
	4,508,452	04/02/85	DiMatteo et al.	356	610	
	4,616,121	10/07/86	Clocksine et al.	219	124.34	
	4,745,469	05/17/88	Waldecker et al.	348	094	
	4,935,635	06/19/90	O'Harra	250	559.06	
	5,028,799	07/02/91	Chen et al.	250	561	
	5,098,426	03/24/92	Sklar et al.	606	5	
	5,131,844	07/21/92	Marinaccio et al.	433	72	
	5,214,686	05/25/93	Webber	378	38	
	5,243,665	09/07/93	Maney et al.	382	152	
	5,347,454	09/13/94	Mushabac	433	214	
	5,513,276	04/30/96	Theodoracatos	382	154	
	5,724,435	03/03/98	Malzbender	382	103	
	5,823,778	10/20/98	Schmitt et al.	433	214	
	5,848,115	12/08/98	Little et al.	378	4	
	5,880,961	03/09/99	Crump	700	112	
	5,886,775	03/23/99	Houser et al.	356	4.01	
	5,985,495	11/16/99	Okumura et al.	430	22	

<b>FORM PTO-1449</b> (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	<b>Atty. Docket No.</b>	<b>Serial No.</b>
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		01,100	09/835,007
(Use several sheets if necessary)		<b>Applicant:</b> Rudger Rubbert et al.	
		<b>Filing Date:</b> 04/13/01	<b>Group:</b> 2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWT	4,634,278	01/06/87	Ross et al.	356	376	
AWC	5,604,817	02/18/97	Massen et al.	382	120	

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

EXAMINER		DATE CONSIDERED	11/29/01

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

SEP 22 2004

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet

1

C

15

Attorney Docket Number

01-100
--------

**Complete if Known**

Application Number

09/835.007

Filing Date

Apr. 13, 2001

**First Named Inventor**

Ruedger Rubbert

**Art Unit**

2625

Examiner Name

Aaron W. Carter
-----------------

Attorney Docket Number

01-100
--------

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>d</sup>
		Country Code <sup>2</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
Aux		JP2000113193	04/21/2000	Fujii et al.		✓
Aux		JPH9-21620	01/21/1997	Hosokawa Katsum		✓

**Examiner  
Signature**

**Date  
Considered**

11/29/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

FORM PTO-1449  
(Rev. 2-32)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01-100

09/835,007

Applicant:  
Rudger Rubbert et al.

Filing Date:  
04/13/01

Group:  
2621

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

RECEIVED

JUN 12 2003

Technology Center 2600



U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AWC	09/560,131		Rubbert et al.			04/28/00
↓	09/560,132		Rubbert et al.			04/28/00
↓	09/560,583		Rubbert et al.			04/28/00
↓	10/136,607		Weise, et al.			05/01/02

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

EXAMINER	DATE CONSIDERED
<i>AC</i>	11/29/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Sheet 1 of 1

<b>FORM PTO-1449</b> (Rev. 2-32)  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> (Use several sheets if necessary)  <div style="text-align: center;"> <b>RECEIVED</b>  <b>APR 09 2002</b>  <b>Technology Center 2600</b> </div>	<b>U.S. Department of Commerce</b> <b>Patent and Trademark Office</b>	<b>Atty. Docket No.</b>  01,100	<b>Serial No.</b>  09/835,007
	<b>Applicant:</b> Rudger Rubbert et al.		
	<b>Filing Date:</b> 04/13/01	<b>Group:</b> 2621	

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

## FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

Ave	Charles A. Pelizzari et al., "Accurate Three-Dimensional Registration of CT, PET, and/or MR Images of the Brain", <i>Journal of Computer Assisted Tomography</i> , 13(1):20-26, January/February, 1989.
	Klaus D. Toennies et al., "Registration of 3D Objects and Surfaces", <i>IEEE Computer Graphics &amp; Applications</i> , 1990, pages 52-62.
	Behrooz Kamgar-Parsi et al., "Registration of Multiple Overlapping Range Images: Scenes without Distinctive Features", <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , Vol. 13, No. 9, September 1991, pages 857-871
	Hui Li et al., "Registration of 3-D Multimodality Brain Images by Curve Matching", <i>IEEE</i> , 1994, pages 1744-1748.
↓	Jean-Francois Mangin et al., "Nonsupervised 3D Registration of PET and MRI Data Using Chamfer Matching", <i>IEEE</i> , 1993, pages 1262-1264.
EXAMINER	DATE CONSIDERED 11/29/01

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

MCDONNELL BOEHLEN  
 HULBERT & BERGHOF  
 300 SOUTH WACKER DRIVE  
 CHICAGO, ILLINOIS 60606  
 TEL: (312) 913-0001  
 FAX: (312) 913-0002

FORM PTO-1449  
(Rev. 2-32)U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01,100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Rudger Rubbert et al.

Filing Date:

04/13/01

Group:

2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

RECEIVED

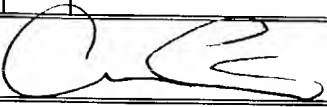
OCT 08 2002

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

AWC		S.M. Yamany and A.A. Farag, "A System for Human Jaw Modeling Using Intra-Oral Images" in <i>Proc. IEEE Eng. Med. Biol. Soc. (EMBS) Conf.</i> , Vol. 20, Hong Kong, Oct. 1998, pp. 563-566.
AWC		S.M. Yamany, A.A. Farag, David Tasman, A.G. Farman, "A 3-D Reconstruction System for the Human Jaw Using a Sequence of Optical Images," <i>IEEE Transactions on Medical Imaging</i> , Vol. 19, No. 5, May 2000, pp. 538-547.
EXAMINER		DATE CONSIDERED 11/29/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.



Form PTO-1449  
(Rev. 2-32)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

Serial No.

01-100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Rudger Rubbert, et al

Filing Date:

04/13/01

Group:

2621

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
Rwp	6.33-.523	12/11/01	Kacyra et al	702	159	

RECEIVED

MAR 27 2003

Technology Center 2600

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation
					Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

EXAMINER	DATE CONSIDERED
<i>Q Q</i>	11/27/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

FORM PTO-1449  
(Rev. 2-32)



U.S. Department of Commerce  
Patent and Trademark Office

Att'y. Docket No.

Serial No.

01-100

09/835,007

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Rudger Rubbert, et al

Filing Date:

04/13/01

Group:

2621

RECEIVED  
JUL 18 2001  
Technology Center 2600

FOREIGN PATENT DOCUMENTS

		Document Number							Date	Country	Class	Subclass	Translation	
													Yes	No
Amc		EP	02	5	0	9	9	3	06/12/87	Europe	—	—		X*
		EP	02	9	4	5	7	7	04/26/88	Europe	—	—	X	
		EP	03	9	1	5	3	2	03/05/90	Europe	—	—	X	
		DE	42	1	8	2	1	9	12/09/93	Germany	—	—		X*
		DE	44	4	5	5	5	2	06/29/95	Germany	—	—		X*
		DE	44	3	6	5	0	0	11/05/95	Germany	—	—		X*
		DE	38	2	9	9	2	5	03/15/90	Germany	—	—		X*
		DE	19	6	38	7	2	7	03/19/98	Germany	—	—	X	
		WO	98	1	1	4	0	3	03/19/98	PCT	—	—	X	
		WO	91	0	5	5	2	0	05/02/91	PCT	—	—	X	
		WO	98	1	1	4	0	4	03/19/98	PCT	—	—	X	
		WO	99	6	0	3	3	2	11/25/99	PCT	—	—	X	
		WO	98	1	0	2	4	3	03/12/98	PCT	—	—	X	
		CA	2	1	63	9	3	4	05/30/96	Canada	—	—	X	

Statement of Relevance included

FORM PTO-1449  
(Rev. 2-32)U.S. Department of Commerce  
Patent and Trademark OfficeINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Atty. Docket No.

01-100

Serial No.

09/835,007

Applicant:

Rudger Rubbert, et al

Filing Date:

04/13/01

Group:

2621

RECEIVED  
JUL 18 2001  
Technology Center 2600

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

AWC			Syrinx Technologies, Inc. publication, "3D Scanner", circa 1998
			Journal of Prosthetic Dentistry article, Dianne Rekow, M.S.M.E., D.D.S., "Computer-aided Design and Manufacturing in Dentistry: A Review of the State of the Art", pp. 512 - 516, October 1987
			Optical Engineering, Vo. 33 No. 6, Yee et al., "Three-dimensional Imaging System", pp. 2070-2075, June 1994
			JADA article, Vol. 118, Karl F. Leinfelder et al., "A New Method for Generating Ceramic Restorations: A CAD-CAM System", pp. 703 - 707, June 1989

EXAMINER

DATE CONSIDERED

11/29/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No.  01,100	Serial No.  09/835,007
INFORMATIONAL CLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant: Rudger Rubbert et al.	
RECEIVED APR 01 2002 Technology Center 2600 COPY OF PAPERS ORIGINALLY FILED				Filing Date: 04/13/01	Group: 2621

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate

## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

hwc			Charles A. Pelizzari et al., "Accurate Three-Dimensional Registration of CT, PET, and/or MR Images of the Brain", <i>Journal of Computer Assisted Tomography</i> , 13(1):20-26, January/February, 1989.
			Klaus D. Toennies et al., "Registration of 3D Objects and Surfaces", <i>IEEE Computer Graphics &amp; Applications</i> , 1990, pages 52-62.
			Behrooz Kamgar-Parsi et al., "Registration of Multiple Overlapping Range Images: Scenes without Distinctive Features", <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , Vol. 13, No. 9, September 1991, pages 857-871
			Hui Li et al., "Registration of 3-D Multimodality Brain Images by Curve Matching", <i>IEEE</i> , 1994, pages 1744-1748.
✓			Jean-Francois Mangin et al., "Nonsupervised 3D Registration of PET and MRI Data Using Chamfer Matching", <i>IEEE</i> , 1993, pages 1262-1264.
EXAMINER			DATE CONSIDERED 11/29/01

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

09 2004

U.S. DEPT. OF COMMERCE PATENT AND TRADEMARK OFFICE

Page 1 of 1

Form PTO-1449

LIST OF PRIOR ART CITED  
BY APPLICANT

(Use several sheets if necessary)

ATTORNEY DOCKET NO.

AUS920010494US1

SERIAL NO.

10/132458

RECEIVED

FEB 12 2004

APPLICANT **Beukema et al.**

Technology Center 2600

FILING DATE **April 25, 2002**GROUP ART UNIT **2661**

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	PUBLICATION DATE	INVENTOR NAME	CLASS/ SUBCLASS	FILING DATE

## FOREIGN PATENT DOCUMENTS

CONFIDENTIAL DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NO.		PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES NO	
Awc	AA	WO 99/35793	Jul. 15, 1999	WIPO	H04L 12/56		X
	AB	WO 00/52883	Sep. 8, 2000	WIPO	H04L 12/00		X
	AC	WO 97/28505	Aug. 7, 1997	WIPO	G06F 13/14		X

## OTHER PRIOR ART (including author, title, date, pertinent page, etc.)

<i>Awc</i>	AD	"Infiniband Architecture Release 1.0, Volume 1, General Specifications", October 24, 2000, pp. 1-880.				
------------	----	---	--	--	--	--

## RELATED PATENT APPLICATIONS

EXAMINER INITIAL	APPLICATION NO./ ATTY. DOCKET NO.	APPLICANT	TITLE	FILING DATE

DATE CONSIDERED

11/29/04

EXAMINER

*Awc*

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.